Vermont Mental Health Performance Indicator Project
Weekly Report
August 20, 1999

Risk Adjusted Criminal Justice Outcome Measures

The rate at which recipients of mental health services find themselves in trouble with the law has been a growing concern of mental health administrators for a number of years. Trouble with the law is also among the indicators of community mental health program performance in the draft recommendations of the Vermont Performance Indicator Advisory Group, and the MHSIP Multi-State Performance Indicator Pilot Project specifically lists arrest rates among its core indicators.

In order to address this issue, the Vermont Mental Health Performance Indicator Project obtained data sets from the Vermont Center for Justice Research at Norwich University that include information on all individuals charged with criminal offenses in Vermont for 1993 through 1997. Earlier this summer, we distributed information on differences in the risk of being charged with a crime among age and gender groups. This week, the same data is used to provide outcome measures for the combined adult treatment programs at each of Vermont's ten comprehensive community mental health centers for 1996.

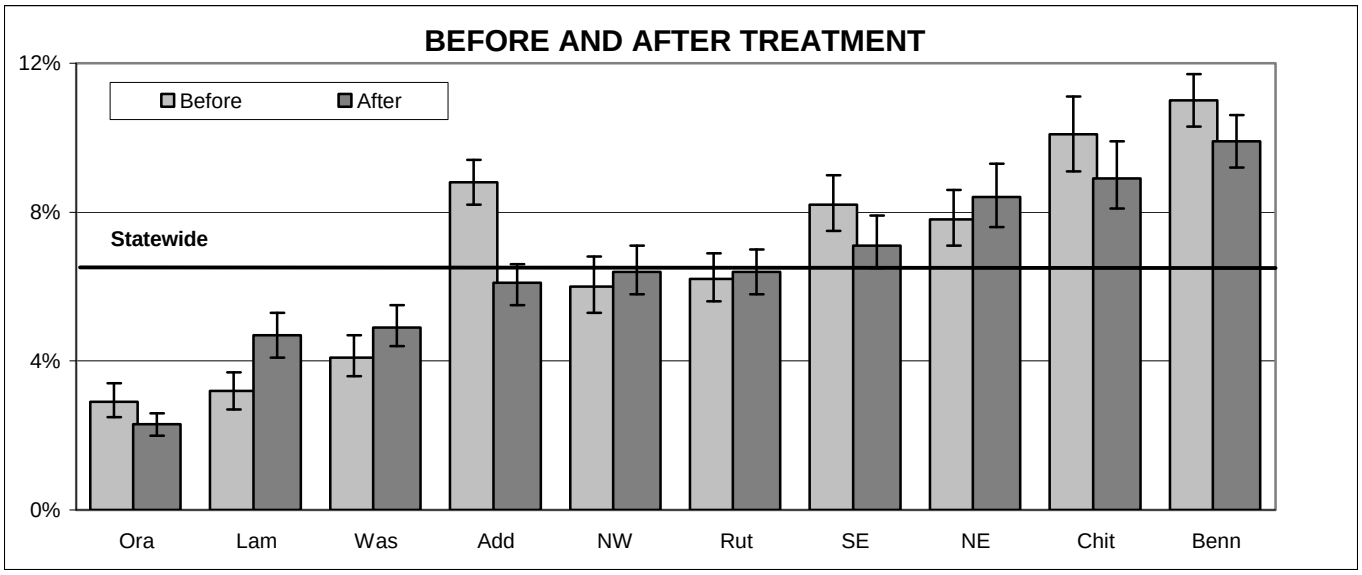
Because the adult treatment programs at each community provider includes a significantly different mix of CRT, Adult Outpatient, and Substance Abuse clients, the results have been risk adjusted to take differences in case loads into account. The risk adjustment procedure used in this case is similar to the case-mix adjustment we have used previously for comparing hospitalization and incarceration rates of community programs. The adjustment involves comparing the relevant outcome measure (in this case the rate at which clients are charged with a crime during 1997) with the same measure for the year previous to treatment (1996).

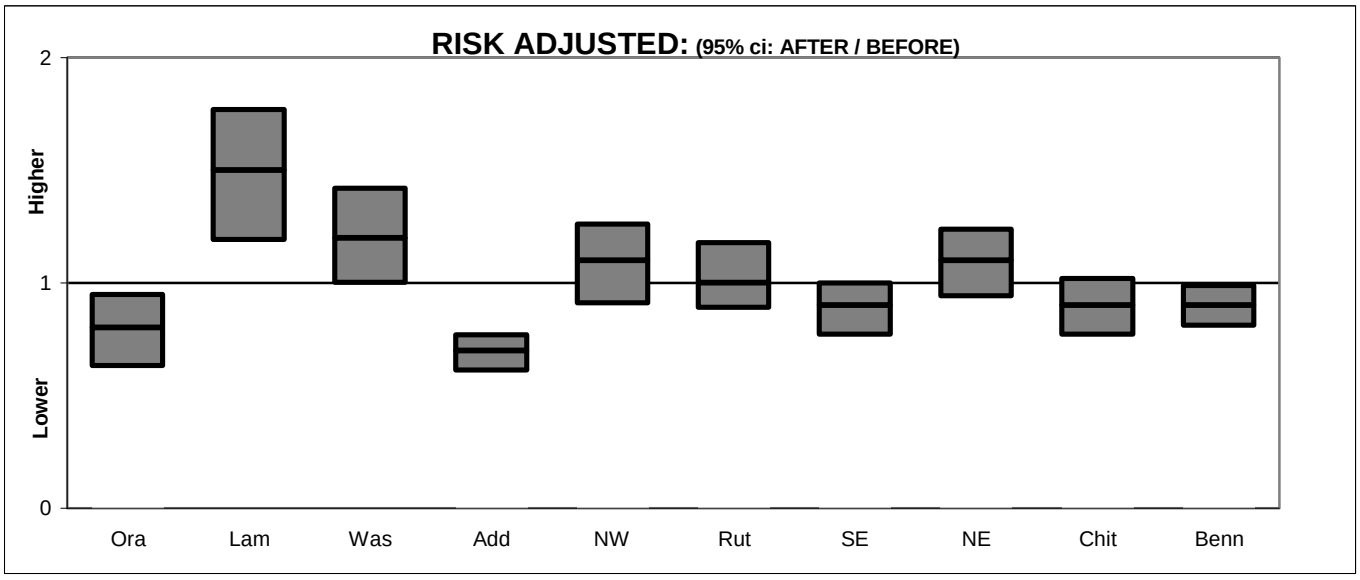
Risk adjustment is being increasingly recognized as a critical part of performance monitoring systems. “Risk adjustment models can contribute to quality improvement by enabling outcomes to be compared fairly across agencies, by providing outcome data for state mental health authorities (SMHAs) to use in imposing performance-based financial consequences on provider agencies, and by providing agencies with incentives to improve access to patients at the highest severity levels. SMHAs are responsible for making providers accountable for outcomes of care delivered to publicly supported consumers. Such accountability is fair only if it can be defined in risk-adjusted terms.” (Hendryx, Dyck, and Srebnik: Risk Adjusted Outcome Models for Public Mental Health Outpatient Programs. *Health Services Research* 34:1, April 1999)

As you will see, the risk adjustment procedure substantially changed our impression of the performance of many of our community programs with regard to this criminal justice outcome. Three-community mental health centers, for instance, had lower than average unadjusted likelihood of consumers getting into trouble with the law after treatment. All three also tended to treat more people who had not been in trouble with the law before entering treatment. When the proportion of consumers in trouble with the law after treatment was compared to the proportion in trouble with the law before treatment a very different picture emerged. One of these agencies had a significant decrease in the rate at which consumers got into trouble with the law (95% confidence interval is less than ‘1’), one had a significant increase (95% confidence interval is greater than ‘1’), and one had a marginal increase. Of the three agencies that had appeared to be performing most poorly (higher than average rates for trouble with the law), none were performing poorly when we adjusted for differences in case load composition.

One of the first “next questions” that occurs to us addresses the consistency of this measure over time. Do individual community agencies tend to produce similar treatment outcomes year after year, or does this outcome measure change from year to year? A second “next question” addresses the possibility of differences in this outcome across programs. We know that people treated by substance abuse programs, for instance, are more likely to get into trouble with the law than people are treated by mental health programs. Would the relative performance of community agencies be different if we focussed on one program at a time? As always, we will be interested in hearing your suggestions for “next questions” as well. Please send your comments, suggestions, and questions to jpandiani@ddmhs.state.vt.us or call 802-241-2638.

IN TROUBLE WITH THE LAW





		Adult CMHC Consumers Charged With a Crime				Risk Adjusted
		Year Before Treatment		Year After Treatment		(After / Before)
	# Served in 1996	Number	Percent	Number	Percent	
Orange	686	20.2 (16.8-23.5)	2.9% (2.5%-3.4%)	15.7 (13.4-18.0)	2.3% (2.0%-2.6%)	0.8 (0.6-0.9)
Lamoille	436	13.8 (11.7-16.0)	3.2% (2.7%-3.7%)	20.4 (17.8-22.9)	4.7% (4.1%-5.3%)	1.5 (1.2-1.8)
Washington	1,197	48.8 (41.7-55.9)	4.1% (3.6%-4.7%)	58.3 (51.4-65.3)	4.9% (4.4%-5.5%)	1.2 (1.0-1.4)
Addison	896	78.9 (73.1-84.6)	8.8% (8.2%-9.4%)	54.3 (49.5-59.1)	6.1% (5.5%-6.6%)	0.7 (0.6-0.8)
Northwest	960	57.7 (49.8-65.6)	6.0% 5.3%-6.8%)	61.8 (55.1-68.6)	6.4% (5.8%-7.1%)	1.1 (0.9-1.3)
Rutland	1,525	94.4 (84.2-104.6)	6.2% (5.6%-6.9%)	97.0 (87.0-107.0)	6.4% (5.8-7.0%)	1.0 (0.9-1.2)
Southeast	2,310	188.5 (169.8-207.2)	8.2% (7.5%-9.0%)	165.1 (148.2-181.9)	7.1% (6.5%-7.9%)	0.9 (0.8-1.0)
Northeast	1,223	95.1 (85.2-105.1)	7.8% (7.1%-8.6%)	102.7 (91.9-113.5)	8.4% (7.6%-9.3%)	1.1 (0.9-1.2)
Chittenden	3,250	326.9 (294.3-359.5)	10.1% (9.1%-11.1%)	290.4 (259.4-321.5)	8.9% (8.1%-9.9%)	0.9 (0.8-1.0)
Bennington	1,128	123.8 (115.7-132.0)	11.0% (10.3%-11.7%)	111.3 (103.2-119.3)	9.9% (9.2%-10.6%)	0.9 (0.8-1.0)
Statewide Average			**6.8%**		**6.5%**	**1.0**

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